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EXAMINER

LESPERANCE, JEAN E

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/182,911

Applicant(s)

WILKS, BARRY G.

Examiner

Jean E Lesperance

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-18 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9, 19, 23, 27, 28, 30-34, 38 and 40 is/are rejected.
- 7) ☒ Claim(s) 4-6, 8, 10-12, 20-22, 24-26, 35-37, 39 and 41-48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-48 are presented for examination.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 9, 19, 23, 32, 33, 38, and 40 are rejected under 35 U.S.C. 102 (b) as being unpatentable over U.S. Patent # 4,990,902 ("Zenda").

As for claims 1 and 32, Zenda teaches a CRT 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command A supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; the display timing signal generating parameters can be changed in correspondence with different display modes resolutions (column 2, lines 66-68) corresponding to b) substituting selected display capabilities for the received capability parameters; and display resolution selecting means selects a display resolution (column

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8, lines 43-44) corresponding to c) providing the selected display capabilities to an operating system.

As for claims 2 and 33, Zenda teaches parameters R2 and R3 constitute a boundary control parameter (column 3, lines 34-36) corresponding to the selected display capabilities is based on a composite of the display parameters of each of the multiple displays.

As for claims 7 and 38, Zenda teaches a CPU Fig.1 (1) corresponding to a processing module; and ROM Fig.1 (5) corresponding to memory operably coupled to the processing module, wherein the memory includes operational instructions that cause the processing module to a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command A supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; the display timing signal generating parameters can be changed in correspondence with different display modes resolutions (column 2, lines 66-68) corresponding to b) substituting selected display capabilities for the received capability parameters; and display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to c) providing the selected display capabilities to an operating system.

As for claims 9 and 40, Zenda teaches a CPU (1) inhibits alteration of the display mode. The flow then advances to step 65, and CPU (1) executes an application program (column 6, lines

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50-53) corresponding to operational instructions that cause the processing module to determine the selected display capabilities based on capabilities of a video graphic card.

As for claim 19, Zenda teaches a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command A supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; if it is determined in step 41 that the display mode is not altered, the flow advances in step 55, and CPU 1 executes initialization including clearing of V-RAM 9 (column 5, lines 9-12) corresponding to b) determining selected display capabilities based on the capability parameters of each display of the multiple displays; the display timing signal generating parameters can be changed in correspondence with different display modes resolutions (column 2, lines 66-68) corresponding to c) substituting selected display capabilities for the received capability parameters; and display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to d) providing the selected display capabilities to an operating system.

As for claim 23, Zenda teaches a CPU Fig.1 (1) corresponding to a processing module; and ROM Fig.1 (5) corresponding to memory operably coupled to the processing module; a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command A supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple

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displays, wherein the capability parameters comprise display resolution and display pixel depth; if it is determined in step 41 that the display mode is not altered, the flow advances in step 55, and CPU 1 executes initialization including clearing of V-RAM 9 (column 5, lines 9-12) corresponding to b) determining selected display capabilities based on the capability parameters of each display of the multiple displays; the display timing signal generating parameters can be changed in correspondence with different display modes resolutions (column 2, lines 66-68) corresponding to c) substituting selected display capabilities for the received capability parameters; and display resolution selecting means selects a display resolution (column 8, lines 43-44) corresponding to d) providing the selected display capabilities to an operating system.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 34 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 4,990,902 ("Zenda") in view of U.S. Patent # 6,104,359 ("Endres et al.").

As for claims 3 and 34, Zenda teaches parameters R2 and R3 constitute a boundary control parameter (column 3, lines 34-36) corresponding to the selected display capabilities is

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based on a composite of the display parameters of each of the multiple displays. Accordingly, Zenda teaches all the claimed limitations as recited in claims 3 and 34 with the exception of providing a video graphic card.

However, Endres et al. teach a two plug-in video cards with one adapter driving a built-in LCD (column 4, lines 53-55) corresponding to a video graphic card.

It would have been obvious to utilize the video card as taught by Endres in the display area control system disclosed by Zenda because this would allow the display position on a display to be optimized in accordance with the display resolution.

Claims 27, 28, 30, and 31 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 4,990,902 ("Zenda") in view of U.S. Patent # 6,067,071 ("Kotha et al.").

As for claim 27, 28, 30, and 31, Zenda teaches a CRTC 13 receives a display timing signal parameter on system bus 3 in synchronism with display timing set command A supplied from CPU 1 through AND gate 15 (column 4, lines 11-14) corresponding to a) receiving capability parameters regarding a first display of the multiple displays. Accordingly, Zenda teaches all the claimed limitations as recited in claims 27, 28, 30, and 31 with the exception of providing a display refresh rate.

However, Kotha et al. teach two video signals having different refresh rates and resolutions (column 5, lines 25-26) corresponding to a display refresh rate.

It would have been obvious to utilize video signals with different refresh rate as taught by Kotha et al. in the display area control system disclosed by Zenda because this would allow the

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display controller to output at least one of a plurality of different graphics display resolutions to a fixed resolution panel display.

Allowable Subject Matter

4. Claims 13-18 and 29 are allowed.
5. Claims 4-6, 8, 10-12, 20-22, 24-26, 35-37, 39 and 41-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance:

None of the references either singularly or in combination, teaches or fairly suggests:

A digital storage medium for storing operational instructions that cause a processing module to support multiple displays associated with a drawing surface, the digital storage medium comprises: first storage means for storing operational instructions that cause the processing module to receive capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; second storage means for storing; operational instructions that cause the processing module to substitute selected display capabilities for the capability parameters; and third storage means for storing operational instructions that cause the processing module to provide the selected display capabilities to an

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operating system. The method wherein step (b) further comprises, in order: identifying the capability parameters as primary parameters in accordance with a first portion of the system start-up; providing the capability parameters to the operating system in accordance with the first portion of the system start-up; and identifying the selected display capabilities as the primary parameters in accordance with a second portion of the system start-up.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Endres et al. teach a system and a technique for allocating display information, where such information to be displayed is received by a graphical device interface program that modifies the information to be displayed on one or more devices before such modified information is provided to the device drivers which control the application and presentations of images on a corresponding single display. Kotha et al. teach a system and corresponding method for storing and presenting image data having a first pixel resolution on a single display having a fixed display resolution. The display resolution of the single display device is set by developers before implementation and stored in a control logic thereof. Zenda teaches a pixel area control system having a function of switching a display mode and inhibiting alteration of the switched display mode in a flat panel display apparatus is provided. When a screen of the selected display mode is smaller than a physical screen of the flat panel display apparatus, the screen is displayed at the center of the physical screen of the plasma display apparatus. None of the references either singularly or in combination, teaches or fairly suggests: "A digital storage medium for storing operational instructions that cause a processing module to support multiple displays associated

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with a drawing surface, the digital storage medium comprises: first storage means for storing operational instructions that cause the processing module to receive capability parameters regarding a first display of the multiple displays, wherein the capability parameters comprise display resolution and display pixel depth; second storage means for storing; operational instructions that cause the processing module to substitute selected display capabilities for the capability parameters; and third storage means for storing operational instructions that cause the processing module to provide the selected display capabilities to an operating system. The method wherein step (b) further comprises, in order: identifying the capability parameters as primary parameters in accordance with a first portion of the system start-up; providing the capability parameters to the operating system in accordance with the first portion of the system start-up; and identifying the selected display capabilities as the primary parameters in accordance with a second portion of the system start-up”.

Response to Amendment

7. Applicant's arguments filed 3-19-2003 have been fully considered but they are not persuasive. The applicant argued that the prior art, Zenda, does not teach or mention an operating system as receiving parameters of a display. Examiner disagrees because the prior art, Zenda, teaches that an application program includes an operating system program hereinafter) developed for a CRT display apparatus, is executed using a plasma display apparatus (column 2, lines 4-6).

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And furthermore, it teaches control means for generating different display timing signals, corresponding to one of the plurality of different display resolutions, in accordance with a designated set of display timing signal generating parameters, and for supplying applied data generated by the application program for display on the flat panel display apparatus (column 7, lines 14-20). It supplying to the application program which includes an operating system a plurality of different resolutions, in accordance with a designated set of display timing signal generating parameters. The applicant argued that the prior art, Zenda, does not teach "a selected display capabilities to an operating system". Once again examiner disagrees because the prior art teaches display timing signal generating parameters (PD) having display timings for forming right and left nondisplay areas of 40 dots, as shown in FIG. 2C, are read out from ROM 5, and are set in display timing register 14 of CRTC 13 through system bus 3. As a result, CRTC 13 generates display timing signals based on input parameters PD, and supplies the signals to plasma display apparatus 7 through pallet 11 (column 6, lines 34-41) corresponding to different selected display capabilities data that are supplying to the application program for display on the flat panel display. Therefore the rejection is maintained as was rejected in the previous office action.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

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Date 5-20-2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600